Description of *Spectamen rikae* n.sp. (Gastropoda: Trochidae: Solariellinae) from the Philippine Islands

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KEYWORDS. Gastropoda, Trochidae, Solariellinae, Philippines, Spectamen rikae n. sp.

ABSTRACT. A new trochid species from the Philippines is described and provisionally classified in the genus *Spectamen*, subfamily Solariellinae, under the name *Spectamen rikae*.

RESUME. Une nouvelle espèce de Trochidae des Philippines est décrite et placée provisoirement dans le genre *Spectamen*, sous-famille des Solariellinae, sous le nom de *Spectamen rikae*.

INTRODUCTION

About one year ago, Fernand De Donder, a well known shell collector who use to travel with his wife Rika Goetheals all around the Philippine Islands, entrusted me with some trochids specimens. It was not easy, at first sight, to find a genus and a subfamily to whom these shells could belong, nor even to decide if they were really Trochidae and not Turbinidae or others. Numerous research and further studies showed finally that these shells were Solariellinae, that the genus *Spectamen* could be suitable for them and that they belong to a species different from all described species.

Abbreviations

Repository

IRSNB : Institut royal des Sciences naturelles de

Belgique, Bruxelles.

MNHN: Muséum national d'Histoire naturelle, Paris.

Other abbreviations

D : diameter H : height

HA: height of aperture

P1, P2, P3, ... : primary cords (P1 is the most

adapical)

Pi: all primary cords

S1, S2, S3, ... : secondary cords (S1 is the most

adapical)

lv : live-taken specimens present in sample dd : no live-taken specimens present in sample

SYSTEMATICS

Family: **TROCHIDAE** Rafinesque, 1815 Subfamily: **SOLARIELLINAE** Powell, 1951

Genus: Spectamen Iredale, 1924

Type species: *Trochus philippensis* Watson, 1881 (by original designation) – Recent, New South Wales, Australia.

Spectamen rikae n.sp. Figs 1-5

Type material. Philippine Islands, Bohol, Balicasag Island, 140 m, fished by tangle nets, holotype IRSNB IG 29828/514, 7.3 x 8.0 mm (lv); paratype MNHN, 7.2 x 8.0 mm (dd); paratype, 7.4 x 7.9 mm (dd), in the author's collection; paratype, 8.4 x 8.6 mm (lv), collection F. De Donder*; paratype, 6.7 x 7.3 mm (dd), collection F. De Donder.

Diagnosis. Shell globose turbiniform, with a narrow umbilicus; whorls convex, bearing smooth spiral cords, body whorl with a periphery obviously angular and carinated; brown with white maculations or flames.

Description. *Shell* of medium size for the genus (height up to 8.4 mm, width up to 8.6 mm), almost as high as wide, rather thin, globose turbiniform; spire moderately high, 2.1x to 2.4x higher than aperture, narrowly umbilicate.

Protoconch of about 1.25 whorl, large for the genus (from 800 to 900 μ m), dome shaped, without apical beak, sculptured by irregular reticulation; 2 or 3 spiral threads only slightly visible but most often lacking; terminal lip straight, not thickened.

Teleoconch of 4.5 convex whorls, bearing smooth spiral cords, with obvious angular carinated periphery. Suture visible, not canaliculated.

^{*} Melsbroeksestraat, 21, 1800, Vilvoorde-Peutie, Belgium.

First teleoconch whorl convex, entirely smooth or occasionally with up to 5 very fine smooth spiral cords, usually so indistinct that the whole surface seems to be smooth.

On second whorl, 5 primary cords becoming distinct and S4 appearing early between P4 and P5; cords evenly distributed, all similar in size, rounded in profile, much thinner than intervals between them, adaptical cord forming a weak angle of shoulder with sutural ramp; weak prosocline axial ribs visible between cords, of same size as intervals between them.

On third whorl, P6 emerging from suture; all cords becoming prominent, similar in shape; P1 weaker than other Pi that are similar in size; angle of shoulder becoming weaker.

On body whorl, axial ribs evanescent and angle at

shoulder disappearing; secondary spiral cords appearing between Pi; tertiary ribs may appear on large specimens; periphery obviously angular, carinated by P6.

Base convex, bearing 7 or 8 spiral cords poorly marked, intervals between cords wider than cords, except for most external cords.

Umbilicus deep but not wide; no spiral cord around

Aperture subcircular, peristome almost complete; outer and columellar lip slightly flattened.

Colour of protoconch whitish brown; whorls of teleoconch light brown to dark purplish brown, with large white dashes that can be aligned, forming flames; umbilical area lighter.

Operculum horny, multispiral, with short growing edge and about 10 volutions.

	Н	D	HA	H/HA	H/D
holotype	7,3-	8,0	3,1	2,4	0,9
paratype 1	7,2	8,0	3,4	2,1	0,9
paratype 2	7,4	7,9	3,4	2,2	0,9
paratype 3	8,4	8,6	3,5	2,4	1,0
paratype 4	6,7	7,3	2,9	2,3	0,9

Table 1. - Spectamen rikae: Shells measurements in mm – sample of 5 specimens.

Discussion. The main problem was to find an appropriate genus for this new species. Without soft parts nor radula, only a provisional genus could be chosen. The protoconch is typically solarielline and the relationship with subfamily Solariellinae is confirmed by subcircular aperture and nearly complete peristome.

The lack of a spiral cord around the umbilicus, the large protoconch coupled with the reduced observed number of whorls led me, following Herbert (1987) and Wilson (1993), to the genus *Spectamen* Iredale, 1924, although Marshall (1999) seems to consider a possible synonymy of this genus with *Solariella* Wood, 1842.

Anyway, *Spectamen rikae* n.sp. is very peculiar and no other known species from the Indo-Pacific area can be confused with it. Especially, the angular periphery is highly discriminating. *Spectamen ruthae* Herbert, 1987 or *S. semisculptum* (von Martens, 1904) from the Indian Ocean (South Africa) are only weakly similar in shape and spiral ornament. The

new species can be also compared to *Minolia cinerea* Preston, 1909 from North Queensland, but this latter has a more rounded periphery and a strongly beaded spiral cord around the umbilicus.

Etymology. The new species is named after the first name of Fernand De Donder's wife Rika, faithful member of the Belgian Malacological Society and enthusiastic collector of Pectinidae.

ACKNOWLEDGEMENTS

I would like to thank here F. De Donder and his wife R. Goethaels who entrusted me specimens upon which the present work is built. I am also very grateful to P. Bouchet (Muséum national d'Histoire naturelle, Paris) for access to the malacological ressources of the MNHN, to V. Heros (MNHN) for the kind attention she gave to all my enquiries for searching various scientific papers, and to R. Houart for his judicious advices.

Figures

- **1-3.** *Spectamen rikae* n.sp. holotype IRSNB IG 29828, Philippine Islands, Bohol, Balicasag Island, 7.3 x 8.0 mm.
- 4. S. rikae n.sp., paratype MNHN, Philippine Islands, Bohol, Balicasag Island, 7.2 x 8.0 mm.
- 5. S. rikae n.sp., paratypc, Philippine Islands, Bohol, Balicasag Island, coll. F. De Donder, 8.4 x 8.6 mm.



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